Equity implications of emerging private standards schemes: What is the role of the public sector?

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Abstract :

The paper explores the evolution of standards setting and implementation, and especially the increased importance of the private sector in these dynamics, with a view to discuss public policy considerations from a producer perspective. Building on insights from South Africa, it provides an initial exploration of the implications at farm level of standard proliferation and the associated consolidation of retail based supply chains. It stresses changes in the institutional and marketing environment associated with standards development, and points out, in particular, the contrast between the long term trend of the withdrawal of state support in the agricultural sector and the increased involvement of retailers at farm level as a consequence of their prominent role in standard setting.

Particular attention is given to the move from public to private standards and its implications for supply chain organisation and market access. The discussion of the evolution of organic and sustainability standards in South Africa presents a clear example of the evolving role of private and public stakeholders and their considerations behind standard setting as well as the private and public systems that accompany standard development and implementation. In line with generally observed trends, the paper shows how the governing process has mostly been driven by private initiatives, with governments lagging in the provision of minimum standards. It also highlights the private sector's innovative and increasingly comprehensive approach to integrating farming and sustainability initiatives, and illustrates how the resultant private systems strongly contrast with the fragmented framework at public level. We argue that this evolution tends to broaden the gap between smallholders and large scale farmers, as it is predominantly the latter that benefits from these changes. The paper concludes with public policy considerations.

1. Introduction

Worldwide, food qualification processes and standards have been proliferating. Thankappan and Marsden (2006) highlights the fact that private standards, which are well established in many developed countries, are rapidly becoming a global phenomena and have been permeating food markets in the developing world (Reardon et al, 2001; Reardon and Berdegué, 2002). As a result, private standards are becoming the predominant drivers of agrifood systems (Henson and Hooker, 2001). The literature highlights the influential role of retailers in defining and regulating food quality (Marsden and Arce, 1995; Harrison et al., 1997; Marsden, 1998). This is in line with the observed shift from mandatory standards as the predominant form of governance over food safety and quality, which is invariably located within the public sector, to more voluntary forms of governance, allowing for a more actively driven private sector (see among others Marsden et al, 2000; Thankappan et al., 2004).

These private standards have evolved in response to regulatory developments and consumer concerns, but also as a means of competitive positioning in markets for high-value agricultural and food products (World Bank, 2005). The proliferation of private standards goes hand in hand with the changing role of standards from reducing transaction costs in commodity markets, to serving as a strategic tool for market penetration, system coordination, quality and safety assurance, brand complementing, and product niche definition (Giovannucci and Reardon, 2000). As a result, standards are no longer merely public goods to resolve market failures, they are strategic tools in market differentiation and are used to protect market share and build a niche (Reardon et al., 2001) as well as tools of chain coordination and meta-management systems (Caswell et al., 1998).

Much has been written on the exclusionary effects of emerging private standards on small scale farmers' market access ((Humphrey et al., 2004; Maertens, 2006; Farina and Reardon, 2000). While the literature clearly alludes to the exclusionary impact of private standards, very little has been written on the question of the role of the public sector in addressing these exclusionary impacts from an equity perspective. These exclusionary effects of private standards allude to the potential public policy considerations of emerging standards and raise the question of the implications of "backstage governance" and private standards for public involvement in standard setting, and more broadly for public intervention in the agricultural sector as discussed in this paper. Concerns regarding food safety and the role of standards is evidently a public policy concern and often lead to the introduction of minimum safety standards. This aspect has been widely explored in the literature (see for example Henson and Caswell, 1999) but the focus has mainly been on the consumer implications. Indeed, Vuylsteke et al (unknown) refers to literature which argues that the incentive for standards to be private decreases as the public good nature of the standard increases. As a result, quality standards are more often private goods, while food safety standards are more likely to take the form of public standards. However, few studies have explored the issue from the producer side, particularly from an equity consideration perspective.

South Africa has not escaped the proliferation of standards and an increasing number of private standard initiatives have emerged in particular in the retail sector. The South African economy is characterized by a clear wealth divide with the so called 'modern' economy consisting of established (28%, mostly urban) and emerging (44%) consumers, as well as a 'marginalized' economy (28%, mostly rural) (SAARF,

2008). The dualism is also very prominent in agricultural production, with a well developed commercial sector of about 39 982 commercial farmers owning the majority of the total agricultural area and producing most of the marketed output (Vink and Kirsten, 2003; Statistics South Africa, 2009) and a small-scale agricultural sector of about 3 million small-scale farmers. While rural development has recently become a clear objective of public policy in South Africa, little attention is given to the implications at producer level of the proliferation of private standards in formal markets, and in particular to the market access dimension of private standards which could impact the broader rural development objective. Of particular concern is the inequality which arises from the exclusionary impact of private standard setting and implementation in formal markets, and who should address these equity considerations.

The paper explores the evolution of standards setting and implementation, and especially the increased weight of the private sector in these dynamics, with a view to discuss public policy considerations from a producer perspective, and in particular the standards-market-access-rural development nexus. Building on insights from South Africa, it provides an initial exploration of the implications at farm level of standard proliferation and the associated consolidation of retail based supply chains. It stresses changes in the institutional and marketing environment associated with standards development, and points out, in particular, the contrast between the long term trend of the withdrawal of state support in the agricultural sector and the increased involvement of retailers at farm level as a consequence of their prominent role in standard setting.

The paper departs with a literature review of the evolving standards landscape. Particular attention is given to the move from public to private standards and its implications for supply chain organisation and market access. This is followed by a discussion on the evolution of organic and sustainability standards in South Africa which presents a clear example of the evolving role of private and public stakeholders and their considerations behind standard setting as well as the private and public systems that accompany standard development and implementation. In line with generally observed trends, it shows how the governing process has mostly been driven by private initiatives, with governments lagging in the provision of minimum standards. It also highlights the private sector's innovative and increasingly comprehensive approach to integrating farming and sustainability initiatives, and illustrates how the resultant private systems strongly contrast with the fragmented framework at public level. We argue that this evolution tends to broaden the gap between smallholders and large scale farmers, as it is predominantly the latter that benefits from these changes. The paper concludes with public policy considerations.

In its discussion, the paper draws on qualitative interviews with key role players in South African supply chains as well as from a questionnaire-based consumer survey of 420 consumers from middle- and upper socio-economic segments (LSM 7, 8, 9 and 10) residing in Gauteng, which was conducted to gather primary data from October to December 2009 on consumers' purchase behaviour and quality perceptions, and that was based on an extensive questionnaire containing a wide range of research questions, multiple choice, Likert scale agreement level, importance scale and rating scale questions). Interviews were conducted with persons pertaining to formal institutions and encompassed most of the large retailer chains and the major wholesale markets, representatives of public bodies as well as certification bodies. Information collection was complemented with website searches. This is supplemented by initial

data from a small scale farmer survey that is currently underway. The survey is based on interviews with small scale producers in the Limpopo province that are selling their produce as organic. The survey is being conducted amongst farmers from the Nkomamonta and Oppro organic farmers associations.

2. The evolving standards landscape and its implications for supply chain governance and small scale farmers

2.1 The move from public to private governance of the agro-food system

The relationship between public and private standards is shifting within the broader context of international markets and international trade and is characterised by a relative decline in the role and involvement of public actors Nadvi (2008). While emerging international agreements and institutions primarily address food safety and the prevention of trade distortions, consumer trends towards quality are increasingly leading towards the development of standards that inform about special product attributes related to environmental, origin/traceability and ethical/social concerns. These alternative product standards are predominantly taking the form of private standards and codes of conduct, which are not subject to state intervention and fall outside the jurisdiction of the WTO. Nadvi (2008) also observes the increasing importance of private actors in the global governance around standard setting. Examples include the Eco-friendly standard, the IFOAM organic guidelines, the Fair Trade Initiative and the Ethical Trading Initiative.

According to Reardon and Farina (2002), the recent development and growth of private standards have been due to the fact that the demand for standards has out-grown the supply of public standards. Also, as Jaffee and Masakure (2005) stress, there is limited confidence in the public sector's ability to govern food quality. Private standards have thus emerged as a result of the shortcomings of public standards. This leads to the question of the degree to which private forms of regulation can replace public governance and furthermore to concerns about the impact of private interests governing food safety and quality (Henson and Reardon, 2005). In addition, private standards have emerged as a product differentiation tool even in instances where there are efficient public standards for food safety and quality, illustrating quality as the new competitive positioning in food systems. Further reasons for the emergence of private standards include the fact that public standards are often non-responsive to changes in the market such as the rise of ethical consumerism and the increased demand for information which relates to the process and not necessarily the product (which is usually what public regulations deal with) (Roberts, 2004). As mentioned by Caswell et al (1998), private standards have furthermore evolved to become important instruments of supply chain coordination and as "meta-management systems" to put in place process standards like HACCP and product quality standards like ISO standards, throughout the supply chain.

The literature emphasises the influential role of retailers in defining and regulating food quality (See among others Marsden and Arce, 1995; Harrison et al., 1997; Marsden, 1998). Konefal et al (2005) identifies three changes that have been important in the restructuring of the agri-food system and in global retailers becoming powerful role players in the global food system. Firstly, the size of the food system and how it has evolved from "local, national and regional networks" to a "global and increasingly concentrated" system; secondly, the emergence of buyer-driven commodity chains; and thirdly the increased importance of market differentiation and

niche production. Konefal et al (2005) conclude that these changes have given retailers the market power to impose their standards on the supply chain. These changes in the agrifood system have given rise to an increasingly private system of governance in the global agro food system.

Henson and Northern (1998) point out that, although voluntary, many private standards are becoming *de facto* mandatory in certain markets. As Vuylsteke et al (unknown) stress, the term voluntary becomes relative as participation is not enforced by law but has become a prerequisite for market access. This is to a large extent the result of the increasing power of large retailers as reflected in the development of the EurepGAP standard by a group of European retailers (Eurep). Now known as GlobalGAP, this standard is an on-farm standard which specifies the requirements for Good Agricultural Practices (GAPs) in primary production with regards to food safety, occupational health and safety, traceability and environmental aspects for farms. It extends the principles of risk identification and management to farm production. It has led to the introduction of audits and third party certification in the preparation, growing, harvesting and packaging of fresh food products. This GlobalGAP standard is a good example of increased retailer intervention at farm level through the introduction of standards, as necessitated by the need to assure quality at consumer level.

2.2 Changes in the governance of the agrifood system and food supply chains

The evolution of private standards reflects the increased role of "soft law"[1] in the governance of economic systems and the innovation of regulatory systems (Thankappan and Marsden, 2006; Morth, 2004). Trends towards quality-oriented and standard-based supply chains are significantly modifying modes of coordination within these chains and are reshaping the organization of production and trade relations. Several authors have pointed out that there is a move away from open spot markets with anonymous suppliers and lack of proper accountability towards higher degrees of vertical coordination in global and quality-oriented food supply chains (Pingali et al, 2005; Buhr, 2003; Ponte and Gibbon, 2005). According to Ruben et al. (2006), increased monitoring of product quality and process standards goes along with an increased degree of vertical integration based on complex contractual arrangements. Over the years, this has resulted in increased reliance on preferred suppliers who can assure safety and be accountable through tracking and tracing, as well as the development of independent certification of good agricultural and good manufacturing practices. Hanf and Pienadz (2007) stresses that the need to act together along the supply chain and to strengthen coordination among actors to meet new quality requirements and trends and ensure differentiation has moved the competition between individual actors to competition between supply chain networks.

Interestingly, Ponte and Gibbon (2005) state that the capacity to capture complex information over quality in standards, labels, certification and codification procedures lowers the need for vertical integration that arises from the increase in quality complexity. Indeed, in many high value supply chains, one or a small number of lead firms employ standards and branding strategies to exercise control over suppliers without necessarily establishing ownership structures (UNCTAD, 2008). Ponte and Gibbon (2005) emphasise the role played by defining and managing quality in buyer

[1] The concept of "soft law" refers to quasi-legal instruments which do not have any binding force, or whose binding force is weaker than that of other regulations.

driven chains where lead firms exercise their 'functional leadership' not only based on their market power (levels of concentration, market share) but also on their control over the qualification mode and information management. They show that firms' capacity to transfer relatively intangible information to their suppliers and/or standardize and/or obtain credible external certification for increasingly complex quality content of goods and services allow for relatively loose forms of coordination and high level of drivenness. This is supported by Vorley (2001) who stresses the increased importance of controlling and owning intangible assets, in particular information and brands, rather than controlling the physical means of production, as ways of dealing with competition and governing supply chains.

Vorley (2001) further argues that the development of standards related to sustainability considerations contribute to reinforcing the control of downstream concentrated players on the governance of the supply chain and the increase in barriers to market entry: "*sustainability as a set of process standards can provide leverage for large enterprises to control markets and raise barriers to competition*". Through their dominant position, downstream players have the capacity to shift the burden of compliance costs and risks to their suppliers and are thus playing an increasing role in farm level decision making without necessarily adopting vertically integrated structures.

2.3 Implications of standards dynamics for small scale farmers

As is widely acknowledged, in many countries the liberalisation process has resulted in the withdrawal of the State from supporting agriculture and from intervening in the market, thus obliging producers to rely on and better harness their competitive advantage and to build direct relations with the market. Vorley (2001) thus puts forward the fact that market access depends on the capacity to exploit 'marketing advantage'. On the other hand, the development of closed supply chains controlled in many cases by major agri-food industry players has changed the rules for market participation in vertically coordinated supply chains with private standards. Giovannucci (2003), referring to expert predictions, states that social and environmental attributes will move from being a basis of differentiation to becoming a criteria for mainstream markets. This will result in it becoming a necessary condition for inclusion in the more developed markets, thereby more strongly affecting small scale farmers. It is thus extremely important to understand the capacity and limitations of small scale farmers for developing and taking advantage of 'marketing advantage'.

From a smallholder perspective, rising quality requirements and the shift away from anonymous market-based exchange of products towards more closely coordinated supply chains can be seen as increasing barriers to entry but also as opportunities, in particular to acquire knowledge and secure market access. Swinnen (2005) points out that there is mixed empirical evidence regarding the extent of small scale farmers' exclusion. Evolving food standards clearly hold implications for small scale farmer participation, often requiring changes in production practices, access to the latest information and the implementation of new processes (Giovanucci and Reardon, 2000). The requirements for participation tend to increase as lead firms demand higher levels of production as well as compliance with more sophisticated product standards. Various studies allude to the exclusionary effects of food quality standards for small scale farmers (Humphrey et al., 2004; Maertens, 2006). It is often asserted that the increasing prevalence of standards may be more difficult for small scale

farmers in developing countries to cope with as a result of the higher cost of compliance due to economies of scale (World Bank, 2005). Transaction costs of compliance for small scale farmers also often exceed that of larger farmers due to higher communication and monitoring costs. Studies have found that this could result in buyers cooperating with larger farmers to the exclusion of small producers (Pingali et al. 2005; Swinnen, 2005). Chemnitz (2007) and Caswell et al. (1998) find that the exclusionary effects of standards may be particularly pronounced in the case of private standards, which are often more onerous with respect to information, communication and documentation of the certification process. The private standards required by retailers focus furthermore predominantly on the management process used to achieve a given outcome in addition to the traditional product control. Farina and Reardon (2000) mention that there is proof that this will, from an investment and management perspective, be most challenging for resource poor, small scale farmers and that this can lead to concentration. The nature of private standards thus further contributes to making private standards more onerous than government requirements (OECD, 2006). Vorley (2001) also questions the possibility of small-scale farmers to exploit 'marketing advantage' on their own when, as he notes, large-scale farmers' capacity to handle post harvest processes and transport may be favoured over small scale farmers' provision of higher quality at a lower cost.

Conversely, other studies highlight the potential of standards for inclusion of small farmers in developing countries in high value supply chains, which are driven by consumers' demand for quality Ponte and Gibbon, 2005; Giovannucci, 2003). In this respect, Chemnitz (2007) point out that, from a retail perspective, standards simplify the information collection process on product quality and can facilitate procurement from various independent producers, opening new opportunities for small scale farmers. From a smallholder perspective, standards could also create learning opportunities by providing knowledge in "packaged" or "codified" form through the standard specification (Fulponi, 2006; Unnevehr, 1996). In quality oriented chains, small scale farmers stand a better chance to comprehend and more readily comply with buyers' requirements through the stronger working links flowing from continued quality improvement, with the levels of success depending on the product, supply chain organisation and farmers' capability. Furthermore, with changes in supply chain requirements associated with quality standards development, competitive advantages may shift in favour of small scale farmers (Altenburg, 2006). In this regard, Ruben et al. (2006) point out the cost advantage of small scale farmers in labour intensive products with high requirements in quality monitoring.

3 Insights from the South African organic and sustainability oriented agrifood sector

In line with international trends, private standards and labelling initiatives are to a certain extent proliferating in South Africa. The South African formal agri-food sector is dominated by the large retail sector, which accounts for more than 55 % of national food retail (Weatherspoon & Reardon, 2003). South Africa has a mature formal retail market, which solely consists of domestic retailers, and is highly concentrated with four dominant players: Shoprite/Checkers, Pick 'n Pay, SPAR and Woolworths. Alternative quality dimensions observed at Woolworths, a quality oriented retail chain, consists of 'organic', 'free range', 'natural', nutritional claims, 'rBST free' claims, 'traditional', cultivar / breed claims and sustainable fishing. Woolworths has,

in particular, increased its organic offering from just over 10 to over 150 lines (www.woolworths.co.za). By 2012 Woolworths aims to achieve organic and free range food sales of over R1 billion per annum (Woolworths Annual Report, 2008). Interestingly standards are not only initiated by the large retailers but also by NGOs such as WWF and Conservation International as part of the GreenChoice alliance or by other supply chain role players such as local farmer markets. However while retailer based standards have already significantly penetrated the South African market, NGO based standards are still at an emerging stage except for the Wine Sustainability Initiative, which is apparently the first of its kind in the world.

The South African standards landscape also strongly features the move from public standards towards private standards. The trajectory of organic standards in particular clearly reflects this international trend in that the governing process is mostly driven by private initiatives, with governments lagging in the provision of minimum standards. Draft regulations, which are to a large extent based on the EU regulations governing organic produce, as well as the IFOAM and Codex Alimentarius guidelines, have yet to be promulgated under the Agricultural Products Standards Act 119 of 1990. Our consumer survey revealed however, that despite the prevalence of private standards schemes on emerging quality trends, South African consumers have more trust in public guarantees of quality (such as certification by the South African Bureau of Standards) than in retailer schemes. Indeed, Consumers' preferred guaranteeing body for organic food is the SABS (42% of organic purchasers), followed by farmers (20%) and retailers (16%). This is so even if retailers have been developing systems that are privately controlled but which, at least in the case of organic production, are certified by a third party, as is the trend internationally.

While quality trends are developing in South Africa, it is important to note that organic production has generally been slow to take off due to various difficulties. It is recognised that there is not a huge producer movement towards organic in South Africa. Most interviewed role players concur that the international organic models cannot be widely implemented in the South African context. Underlying the difficulties to convert to organic is the fact that the institutional and market system for organic production is different from that of conventional agriculture as stressed by Giovanucci (2006). With respect to the regulatory framework, organic producers need to adhere to both the regulations governing conventional agriculture and the more onerous set of requirements for organic production. It is stressed by a number of role players that the government could play an important role in the establishment of different farming systems such as organic production. Although organic production entails the adoption of production practices that are environmentally and socially more beneficial, very few of the institutional and other resources that exist for conventional farming (research facilities and support, input availability and subsidies, communication infrastructure) are available for organic producers, according to various role players. Knowledge is considered as a crucial dimension for organic supply chains. Morgan and Murdoch (2000) among others mention that organic farming is an intensive learning process both in terms of technical and commercial knowledge. As organic practices are often closely linked to a specific location, scientific knowledge is regularly used in subtle ways together with indigenous local knowledge. This implies new skills for the extensionists. Role players, including farmers and representatives of private certification bodies, emphasise the need for knowledgeable extensionists that can provide relevant extension services to support the shift towards organic production. The current capacity of the public extension

officers is seriously questioned even if the problem appears to vary across provinces. This creates significant difficulties for converting from conventional farming to organic farming.

On the other hand, as widely discussed in the literature, organic production could present an interesting comparative advantage for resource poor farmers, as the majority of them have been practising a form of organic production for generations as a result of resource constraints (Africa Research Bulletin, 2006; Thamaga-Chitja and Hendriks, 2008). However, only a few initiatives are taking place at small scale farmers' level in South Africa and being documented in the literature. These include farmers who benefit from NGO technical support and/or provincial state support such as the Ezemvelo Farmers Organisation (EFO) that supplies Woolworths with organic production[2]. Other initiatives such as the Letaba Organic Farmers' Association can also be mentioned. The latter is a certified organic Black Economic Empowerment farming project supported by the Organic Farmer Group's continued mentorship and marketing programme and which supplies Pick 'n Pay and Spar. An investigation into identifying organic small scale farmers in the Limpopo province confirms that there are very few small scale farmers marketing their produce as organic. In addition, these farmers are found in very remote and widespread areas.

These lack of small scale farmer initiatives can be ascribed, in addition to the general constraints faced in converting to organic production discussed above, to the way the organic sector has been developing in South Africa with a strong drive from the formal retail sector. This casts serious doubt on the ability of small scale farmers to successfully enter this market, contrary to what the Africa Research Bulletin (2006) suggests (Biénabe, Vermeulen and Bramley, 2011). South Africa has a strong dualistic agriculture context, an environment in which, as pointed out by Reardon et al (2009) and confirmed by Louw et al (2007), small scale farmers are largely excluded from large retailer procurement schemes that demand a high level of technology in terms of farming and post harvest handling practices. This includes a need for storage facilities (often cold-storage) and transport. These are factors that have large cost implications. In addition to these general retailer requirements that create high barriers to market entry for small scale farmers (Reardon et al, 2003; Louw et al, 2007), supplying organic products also means adopting expensive and lengthy certification procedures imposed by the retailers in accordance with international standards (e.g. producers face a three years organic conversion process before being fully certified). As confirmed by the initial interviews with small scale farmers that have been engaging in organic agriculture in South Africa, this is particularly burdensome for small scale farmers as they do not produce enough produce of the quality demanded to meet the fixed costs of compliance (Hallam et al, 2004). The high cost of certification is cited as their primary concern and has led to a few cooperative initiatives and group certification schemes to off-set the economies of scale faced by small scale producers, so as to reduce the unit cost of certification. It is apparent that the size of the economic unit is a major constraint faced by these farmers, also in securing contracts with retailers and in financing infrastructure. This is in line with what Hendriks and Lyne (2009) point out in that small scale producers often need to market their produce collectively in order to reduce unit compliance and transaction costs to viable levels. These initiatives are however dependant on group dynamics which impose new constraints such as free rider behaviour and interpersonal

[2] In 2001, this group of small scale farmers was the first to convert to certified organic farming. EFO members use traditional farming knowledge to produce root crops organically.

dynamics, which in many instances lead to a breakdown of working relationships and group disintegration. An important factor in this is the remoteness of farmers and the fact that they are located over a widespread area. This is confirmed by Hendriks and Lyne (2009) that note that these groups present their own costs and institutional challenges that hamper small scale farmers' proper participation.

Interviews with small scale farmers also indicate as challenges to organic production the lack of access to affordable organic inputs such as authorised pesticides and certified organic seeds and the financial means to finance initial infrastructure needs such as irrigation systems and netting. Although the lack of input access is considered by most interviewed role players as a major constraint for organic farming in South Africa in general, it can be argued that the lack of access to organic inputs favours very large scale farmers that can produce their own organic inputs. This is observed in the chicken production in particular where vertically integrated role players can internally produce vegetarian food. Small scale farmers furthermore list the lack of technical assistance and knowledge as a major constraint to accessing organic markets. The lack of skilled extensionists is seen as a particular concern with regard to supporting small scale farmers in converting to organic production, where both agronomic skills and ecological understanding are required. In developing countries, specific technical support is often provided by development organisations (Giovannucci, 2006). However, it has been mentioned that fewer NGOs actively support small scale farmers in South Africa compared to other Southern African countries, especially in the organic field. A further difficulty appears to be the fact that while the DTI is supportive, the NDA does not have a particular interest in organic production as it is not considered suitable for small scale farmers. In addition, private sector initiatives are often hampered by the lack of public support.

The difficulties faced at production level in converting to organics and in particular the increased costs of inputs etc. have led to the emergence of new sustainable standards that are currently being developed in South Africa. The most advanced illustration of this is the 'Farming for the future' initiative introduced by the Woolworths retail chain in 2007. Instead of following international organic models, this initiative introduces a new way of farming fresh produce by moving towards more biologically oriented farming systems with reduced input use and costs. According to Woolworths food division head Julian Novak, this new approach will result in decreased use of pesticides, herbicides and fertilisers; conservation of water resources; reduction in chemical runoff into rivers and dams; biodiversity protection and allowing the earth to more effectively bind carbon. It was introduced as a result of the retailer's realisation that organic production is not a large scale solution, given its inconsistent yields, but also on demand of farmers that have been informing the retailer that soil productivity was deteriorating. There was thus a demand to improve the soil through alternative production methods. The retailer's customers were also increasingly concerned with the environmental aspects off production and insisting on more sustainable practices. While the retailer will continue to offer organic products to consumers, its broader strategy is based on its "Farming for the future" approach which involves systematic control over the whole production process. According to the Woolworths's CEO "Woolworths agricultural experts have been working closely with each individual produce farmer, ensuring that they understand the principles of farming for the future, as well as how to carry out the assessments that help them manage their crop production". The process entails independant audits of individual farmers to assess each farm's baseline and to determine the goals towards which it is

working. The retailer is carrying the cost of these audits. Woolworths has indicated in a press release in August 2010, that 68,6% of the retailer's fresh produce is now being sourced from suppliers engaging in more sustainable farming practices. By 2012, Woolworths aims to have all its locally grown fresh produce sourced from farms either using a farming for the future approach, or organic farming. Concern has been raised however as to the actual technical specifications of this approach to farming including the allowable levels of chemical to be used. Lack of transparency is also a concern as the standards have not been made publicly available as in the case of organics. As developer of these standards, Woolworths is furthermore also paying for the farm audits by Enviroscientific and as such there is no independent body governing this process.

The case of the these emerging standards related to sustainable dimensions provides further interesting insights into understanding the evolution in standard setting and their implications for supply chains and small scale farmers market access. While interviews clearly point out that leading large retailers are well informed about and are influenced by global trends, they adapt their own approach to the local context. With regard to labelling dimensions such as organic or free range for which international standards exist, the large retailers adopt widely recognised international standards rather than devising their own standards, the credibility of which may be questioned. While retailers are to a certain extent standard takers in terms of organic labelling, relying on international standards to build their in house standards, major retailers (Woolworths and now also Pick 'n Pay) are being more innovative in building their own sustainability standards and labelling initiatives.

Interviews with role players from the South African agro-food system indicate that wholesaler and retailer approaches to quality and small scale farmers' inclusion have been changing significantly over the last five years in the formal South African agri-food system. There has been a move towards considering a wide variety of quality related dimensions in procurement and marketing strategies. This goes along with the emergence of new farming practices and farming models brought about, to a large extent, by the increased involvement of the private marketing sector in defining and promoting these new types of production practices. As a result, leading retailers are adopting comprehensive quality approaches that go beyond the focus on the products and are progressively exploring different dimensions related to quality that are not necessarily yet reflected on products in terms of labelling strategies. While not necessarily evident yet at consumer level as indicated by our consumer survey with consumers still largely applying basic quality and convenience considerations (e.g. appearance, taste), while credence attributes (e.g. animal welfare, environmental practices, safety) are being poorly considered across products except for some health attributes, more comprehensive quality approaches to procurement are being developed by retailers. Indeed, according to the survey data, the five most important considerations for purchasing chicken are freshness (most important factor for 18% of total sample; overall average rating score of 9.44 on a scale from 0 to 10), price (most important factor for 16% of total sample; overall average rating score of 8.87), expiry date (most important factor for 16% of total sample; overall average rating score of 9.28); clean meat (most important factor for 10% of total sample; overall average rating score of 9.45) and appearance (most important factor for 9% of total sample; overall average rating score of 9.28). The most popular tomato types were medium tomatoes (regularly purchased by 70% of purchasers) and large tomatoes (26% of purchasers). The 5 most important considerations for purchasing tomatoes are

freshness (most important factor for 30% of total sample), price (most important factor for 14% of total sample); expiry date (most important factor for 10% of total sample); firmness (most important factor for 8% of total sample) and quality guarantee (most important factor for 8% of total sample). In this respect, large retailers acknowledge that changes in consumer behaviour over the past decade have been less significant than changes in business' approach to quality positioning.

The development of these sustainable farming practices together with the labelling thereof is mainly a privately driven movement with retail leaders being the most important players. The increasing role of NGOs is also worth noting with new players such as the GreenChoice Alliance significantly investing in this field as already mentioned above. From a commercial farming perspective, some of the production leaders such as ZZ2 have already begun adhering to these new farming models. However, these sustainable farming practices and marketing could also open options for small scale farmers by assisting them with facing production and marketing challenges. As in the case of organic standards, the move of farmers, and especially of small scale farmers, towards more sustainable practices is however constrained by their capacity to access information, technical advice and market opportunities. As particularly evident in the case of the 'Farming for the future initiative', retailers play an important role in addressing the knowledge deficit in converting to these practices. Long term contractual arrangements and technical support that are part of many retailers' preferential procurement systems are used to assist farmers with the specific knowledge and asset investments required for converting to organic and/or sustainable farming. This is in line with what Morgan and Murdoch (2000) discuss in the UK context, with the retailer Sainsbury addressing the knowledge gap by using its own supply chain as an instrument for information exchange on technical as well as commercial issues. Furthermore, in the case of sustainable standards, it appears that retailers are investing more strongly in the agricultural sector and are contributing to defining new agricultural models, playing a key role in developing innovative sustainable farming practices.

It is worth pointing out though that, as is widely known in South Africa and confirmed by in-store observations, the different large retailers' positioning with regard to quality differ significantly. In this respect, Woolworths acts to a certain extent as the leader with regard to alternative quality trends and is differentiating itself based on this. This is evident from its involvement with biodiversity labelling initiatives (in particular in the wine and the potato industry) or the Lamb and Predators initiative, which have been initiated by NGOs together with provincial institutions to promote livestock practices that assist with predator conservation. The Lamb and Predators initiative is also a good illustration of activities undertaken by retailers together with other role players towards changing suppliers' practices that are currently not reflected in labelling strategies. Woolworths' differentiation based on alternative quality attributes is further also evident from its move towards extending the importance of free range, organic and biodiversity friendly products in its stores.

However the move towards sustainability standards represent a broader trend than just an individual move and strategy of differentiation from a large retail chain, with both other retailers and other actors such as conservation NGOs and local farmer markets being in the process of developing new standards. As was briefly depicted in this article, quality and standards dynamics are evolving very rapidly with different players positioning themselves and being very proactive with regard in particular to consumer behaviours, which are still very much oriented towards conventional

quality. This raises serious issues as to who can benefit from these new market opportunities associated with the labelling strategies as well as from the increased support and investment made by the retailers. As pointed out, preferential retailer schemes have until now mostly involved large scale farmers (Weatherspoon and Reardon, 2003; Louw et al., 2007). The analysis of the development of alternative quality standards by the private sector, and in particular the emergence of new sustainability standards, broadens the argument that has now been widely made in the literature and synthesised earlier in this paper of the exclusionary effects in particular for small scale farmers of these developments. It is thus increasingly important to explore how these equity issues can be addressed and in particular to discuss the potential need for public sector involvement.

4. Conclusion: Debating public policy responses to agrifood restructuring associated with private standard proliferation

As mentioned in the introduction, the guiding principle governing public intervention in food standards has to a large extent been limited to food safety considerations and the protection of the consumer. This especially true for the South African context From the above discussion however, it is clear that the proliferation of private initiatives around standard setting holds significant implications for supply chain restructuring and market access for small scale farmers. The discussion further points out the increasing gap between the involvement of retailers at farm level as a result of private standard initiatives on the one hand, and the long term trend of the withdrawal of public support in the agricultural sector on the other. The actual and potential exclusionary implications of this raises the question of how equity considerations should guide state involvement in standards setting and involvement in the agricultural sector in general, so as to assist small scale farmers in meeting ever more demanding market access requirements and to be able to take advantage of emerging quality dynamics.

As Farina and Reardon (2000) point out, whether standards have an exclusionary effect or not depends on a number of factors including the policies, institutional and organisational responses of governments. In the past, approaches to rural development were influenced by dependency and political economy theories. According to these approaches, markets and market intermediaries were seen as sources of exploitation. However, new thinking around rural development since the 1990's, has led to an increased importance in "market promotion, market integration and market access" as central strategies for poverty reduction (Scott, 2005). Vorley (2001) highlights the role that government can play in building small scale farmers' capacity to access supply chains, especially by being able to comply with standards. As such, the market access implications of standards place it well within the rural development mandate of developing country governments. Against this backdrop it is important for the public sector to view its policies in the context of developing private food standards. It is thus crucial for the public sector to take note of and understand the implications of emerging quality and standards based trends and of the retail driven restructuring in the food system with the aim of designing support aimed at the specific characteristics of the small scale farming sector.

Appropriate public sector responses would need to provide for the evolution of small scale farmers in order for them to benefit from the opportunities associated with emerging standards. This would need to include measures aimed at facilitating

compliance with private standards, both in domestic and international markets (Henson and Reardon, 2005) to ensure market access. In this respect Farina and Reardon (2000) points out that government needs to provide appropriate tools for building human capacity (through access to information and technical advice) as well as access to credit in order to finance the necessary physical investments required in order for small scale farmers to become compliant with the various standards. This implies the adoption from the public sector of a comprehensive or at least coordinated view in supporting small scale farmers. This is especially important in view of the emerging trends towards a more comprehensive approach from the private sector that invest in farming systems along with its development of standards, which as we have discussed is mainly to the benefit and support of a selected set of large scale farmers.

Regarding the possible action of the public sector with regard to standard setting, Codron et al (2005) show that retailers' motivation to differentiate themselves through the use of a "premium private label (PPL)" increases when public quality systems decline, while increased public quality systems can contribute to PPL development but do not necessarily result in a similar rise in PPLs. By taking note of the interaction between public and private standards, tailored public quality systems could be used to influence private retailer strategies in accordance with public interests. However in the South African context at least, the analysis of the public standards landscape clearly shows the high level of fragmentation in the public South African food safety and quality system, a factor which is very likely to hamper the development of tailored public quality systems. Food safety and quality issues fall under different government departments including the Departments of Agriculture Forestry and Fisheries (DAFF), Department of Health and Department of Veterinary Health. With respect to the domestic market, the Directorate Food Safety and Quality Assurance, which falls under the DAFF, is responsible for all food quality issues, including grades and classes, marking, packaging and labelling as well as the chemical composition and microbiological contaminants of the products, but only to the extent that it does not relate to food safety. The Department of Health is responsible for food safety regulations for the local market. With respect to food safety issues for export markets, the Directorate Food Safety and Quality Assurance also deals with food safety standards for exports of plant products. Food safety for the export of animal products falls under the Department of Veterinary Sciences and processed foods under the South African Bureau of Standards. Attempts have been underway for some time to streamline this complex institutional and regulatory system that adversely impacts on coordination and access to information as well as on the capacity to design tailored public quality systems that could address not only consumer issues but also the producer dimension that has been discussed in this paper.

Another important consideration in the dualistic South African agricultural context is the need to differentiate public support in accordance with commercial versus small scale production systems. The need for public support to be differentiated according to the type of farming system is affirmed by Vorley (2001) who points out the process of rural differentiation and of diversification currently taking place in the smallholder economy and the need to understand it. There has until now been a lack of policy options aimed at allowing small scale farmers to benefit from quality dynamics. There is a need to identify the nature of the upgrading in different supply chains and to relate it to the innovation capacity of the actors. This holds implications for public support in that it necessitates policy differentiation with respect to, amongst others, extension services and market access.

This paper clearly stressed the need for renewing the public policy approach towards the agricultural sector in view of the new development in private standards, at least in countries such as South Africa where the public sector has been significantly withdrawing from its role in setting standards and regulating markets, and has not yet developed adapted support to small scale farmers. This is especially important given the private sector dynamics associated with standard development and which is mainly driven by retailers. As put forward in this paper these retailer differentiation strategies are quite innovative and based on alternative quality standards development and goes along with a comprehensive approach in retailers' relations with farming systems. This is further increasing the gap between farmers engaged in retailer based coordinated supply chains and those who are not, including in particular small scale farmers.

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